

Consumers Energy Reactive Power (VAR) Outlook

Rick Blumenstock
Executive Director of Electric Planning

October 6, 2021

VAR Demand



Customer Load



Power Transmission

VAR Supply



Capacitors connected to the high voltage system



Capacitors connected to the low voltage system



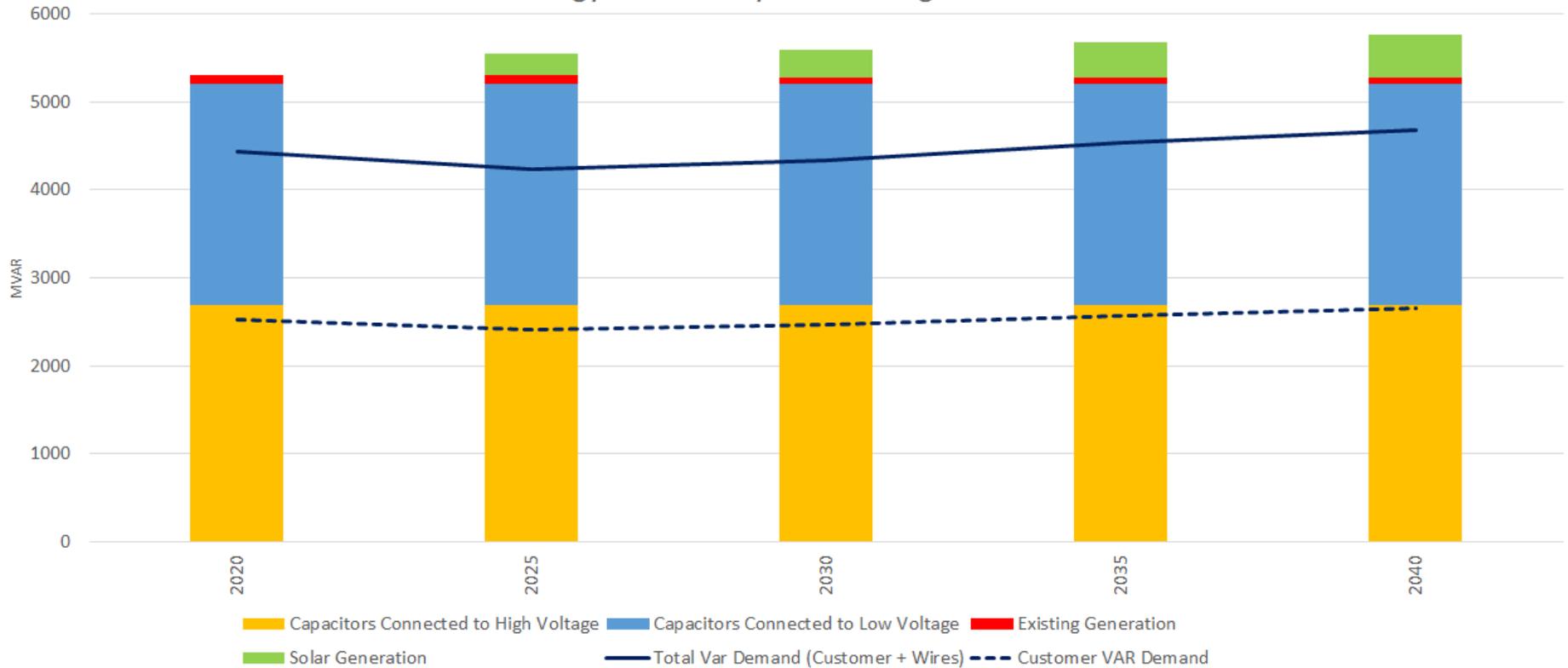
Existing Generation



Solar Generation

VAR Outlook (2020 to 2040)

Consumers Energy's Electric System During Peak Load Conditions



Key Takeaways

- Consumers Energy has sufficient supply of VAR to meet expected VAR demand through at least 2040
- Solar generation will provide VAR
- Modular supply of VAR provides several benefits
 - ✓ Locates VAR supply where it is needed and consumed
 - ✓ Offsets VAR demand resulting from delivering real power
 - ✓ Ensures reliability of VAR supply
- Solar Generation in our outlook is in addition to a significant expansion of solar on the transmission system and existing baseload generation